

REMARKS

Claims 32-47 are pending in the application. Claims 32-47 stand rejected. The applicant respectfully requests consideration of the following remarks and allowance of the claims.

New Matter Objections and 35 U.S.C. § 112 Rejections

Claims 33-37 and 41-45 are objected to as adding new matter. Claims 33-37 and 41-45 also stand rejected under 35 U.S.C. § 112 , first paragraph, as failing to comply with the written description requirement. The applicant contends that no new matter has been added and that the claimed subject matter is adequately described in the specification. Rather, the specification of the present application contains ample support for all the aspects of claims 33-37 and 41-45. The objections and rejections should be withdrawn accordingly.

Claims 33, 41, 36, 44, 37, and 45 are objected to and rejected for the phrase “a second subscriber unit”. However, the specification teaches a second subscriber unit in that *multiple subscribers* (page 2, line 17) and *a plurality of subscriber sites* (page 5, line 20; page 8, line 21) are described. The accompanying description of FIG. 3 indicates that subscriber unit 300 is illustrative of the type of subscriber unit that is provided at *each* subscriber site (page 9, line 23). The second subscriber unit is another, or second, subscriber unit of the multiple subscribers or plurality of subscriber sites. For the aforementioned reasons, claims 33, 41, 36, 44, 37, and 45 are allowable.

Claims 34, 42, 35, 43, 36, 44, 37, and 45 are objected to and rejected for the phrase to “multiplex the first local demodulated signal onto a first local network for delivery to a first destination device”. However, the specification teaches in several instances multiplexing a first local demodulated signal onto a first local network for delivery to a first destination device. In a first instance, the specification discloses subscriber site equipment 112-119 that demodulates two RF channels simultaneously and then *multiplexes the two demodulated channels onto a single Ethernet interface* (page 6, lines 11-12). In another instance, the specification discloses a subscriber unit 300 that *multiplexes received data from both downstream channels onto a local subscriber network* is disclosed (page 10, lines 12-13). In yet another instance, the specification

discloses demodulators 322A and 322B that demodulate a received signal into a unicast signal 101U and a multicast signal 101M and *multiplex the digital signals onto an Ethernet link 325* (page 11, lines 21-23). For the aforementioned reasons, claims 34, 42, 35, 43, 36, 44, 37, and 45 are allowable.

Claims 37 and 45 are objected to and rejected for the phrase “second unicast signal”. However, the specification clearly teaches a “second unicast signal”. The specification discloses a transmission headend facility 110 that transmits *multiple* channels of video, audio, or other data in *unicast* mode to *multiple subscribers* via a segmented frequency band (page 5, lines 23-26). The second unicast signal is another one, or second, of the multiple channels of video, audio or other data transmitted in unicast mode to multiple subscribers. For the aforementioned reasons, claims 37, and 45 are allowable.

Claims 36 and 44 are objected to and rejected for the phrase “third local demodulated signal”. However, as discussed above the specification teaches multiple subscriber units, multiple unicast signals, and a multicast signal. The third local demodulated signal referred to in claims 36 and 44 is the multiplex signal demodulated by another one of the second subscriber units into another, or third, local demodulated signal and multiplexed onto one of the local networks.

Claims 36 and 44 are further objected to and rejected for the phrase “second local network”. However, as discussed above the specification discloses multiple *subscriber sites* (page 5, line 20; page 8, line 21). Each subscriber site has a local network (page 10, line 13). The second local network referred to in claims 36 and 44 is another, or second, local network at another local subscriber site.

Claims 36 and 44 are further objected to and rejected for the phrase “third destination device”. However, as discussed above the specification discloses multiple subscriber sites. Each subscriber site has a local network. Multiple devices are connected to the local network (page 2, line 23). The third destination device referred to in claims 36 and 44 is another one, or third, of the devices on one of the local networks.

Claims 36 and 44 are further objected to and rejected for the phrase “multiplexing the third local demodulated signal into a second local network for delivery to a third destination device”. However, as discussed above the specification clearly teaches

multiplexing local demodulated signals onto a local network. The specification also teaches multiple subscriber units and multiple local networks. As further discussed above, the third local demodulated signal is another, or third, local demodulated signal, and the second local network is another, or second, local network. Another one of the subscriber units multiplexes the third local demodulated signal onto second local network. For the aforementioned reasons, claims 36, and 44 are allowable.

Objections to the Drawings

The drawings are objected to under 37 C.F.R. § 1.83(a) as not showing every feature of the invention as specified in the claims. In particular, the final Office action objects that the drawings do not show a second subscriber unit, a multiplexer, a second unicast signal, a third local demodulated signal, a second local network, and a third destination device. The applicant requests that the objection be withdrawn.

The applicant is required to *furnish drawings where necessary for the understanding of the subject matter to be patented* (37 C.F.R. § 1.81(a)). Additional drawings that literally show multiple subscriber units are not necessary to the understanding of the claimed invention. Rather, the drawings and specification together clearly provide for a sufficient understanding of the claimed subject matter.

For example, FIG. 1 illustrates a subscriber site 120, while FIG. 3 illustrates a subscriber unit 300. The accompanying description of FIG. 1 indicates that multiple subscriber sites are contemplated (page 5, line 20). In addition, the accompanying description of FIG. 3 indicates that subscriber unit 300 is illustrative of the type of subscriber unit that is provided at *each* subscriber site (page 9, line 23). The second subscriber unit referred to in the claims is another subscriber unit provided at another subscriber site. The illustration of subscriber unit 300 therefore adequately provides for the necessary understanding of the second subscriber unit as claimed. Regardless, multiple subscriber sites 120 (A1, A2, B1, B2, C1, and C2 in FIG. 7) are shown in the drawings.

The applicant notes that, contrary to the assertion in the final Office action, a multiplexer is not claimed. Rather, the first and second subscriber units are described in the claims as performing a multiplexing function. A multiplexer per se is not claimed.

35 U.S.C. § 102(b) Rejection

Claims 32-47 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,072,784 (Argrawl). The applicant respectfully disagrees for at least the following reasons. The examiner is kindly requested to reconsider the rejection.

Independent claims 32 and 40 describe a network transceiver processing a first unicast signal using a first code to generate a first CDMA signal. The network transceiver also processes a multicast signal using a second code to generate a second CDMA signal. The network transceiver then *simultaneously* transmits the first CDMA signal and the second CDMA signal. A first subscriber unit receives both the first CDMA signal and the second CDMA signal. Argrawl fails to disclose all of the limitations of claims 32 and 40. Claims 32 and 40 are therefore allowable.

The final Office action equates the data traffic received by base station B with the *unicast signal* recited in claims 32 and 40. The final Office action also equates the video traffic received by base station B with the *multicast signal* recited in claims 32 and 40. However, Argrawl does not specify whether either the data traffic or the video traffic is unicast or multicast traffic. While Argrawl does disclose that base station B is capable of transmitting in a unicast/multicast phase (Argrawl, col. 10, lines 32-34), Argrawl does not distinguish what type of traffic is received by base station B. Such an assertion is based on improper hindsight reasoning.

In addition, the final Office action equates the base station B transmitting two CDMA signals to mobile stations X and Y with *simultaneously transmitting the first CDMA signal and the second CDMA signal* as recited in claims 32 and 40. Next, the final Office action equates either mobile station X or Y receiving the two signals with the *first subscriber unit receiving the first CDMA signal and the second CDMA signal*. Such a characterization of Argrawl is incorrect. In Argrawl, the base station B transmits one of two CDMA signals to mobile station X. Simultaneously, the base station B transmits the other of two CDMA signals to mobile station Y. However, Argrawl does not disclose that the two signals transmitted simultaneously are received by a single one of the mobile stations X and Y.

Further in claims 32 and 40, two codes are recited to generate the first and second CDMA signals. The first subscriber unit then receives both the first and the second CDMA signals. In contrast, Argrawl discloses that each CDMA code can be allocated to exactly one mobile unit per time slot (Argrawl, col. 9, lines 41-45). Thus, Argrawl does not disclose a subscriber unit that receives two different CDMA signals generated using two CDMA codes and transmitted simultaneously.

For the aforementioned reasons, claims 32 and 40 are allowable over Argrawl.

In claims 33 and 41, the final Office action equates either mobile station X or Y receiving the two signals transmitted by base station B with *receiving the second CDMA signal in a second subscriber unit*. However, claims 33 and 41 require the second CDMA signal, transmitted simultaneously with the first CDMA signal, to be received by both the first subscriber unit and the second subscriber unit. Argrawl only discloses multiple signals transmitted by base station B to mobile stations X and Y. Argrawl does not disclose that one of the mobile stations X or Y receives both the first and second signal, and that the other mobile station also receives the second signal. Argrawl actually teaches away from such a requirement by disclosing that each CDMA code can only be allocated to *exactly* one mobile unit per time slot (Argrawl, col. 9, lines 41-45).

For the aforementioned reasons, claims 33 and 41 are allowable over Argrawl.

In claims 34 and 42, the final Office action equates the mobile station X or Y communicating with other communication devices or computers via base station B with *demodulating the first CDMA signal into a first local demodulated signal and multiplexing the first local demodulated signal onto a first local network for delivery to a first destination device*. As described in claims 34 and 42, the first local demodulated signal is related to the first CDMA signal and is itself multiplexed onto the first local network. In contrast, Argrawl discloses the mobile station modulating new traffic destined for another device so as to transmit the new traffic to base station B. The new traffic to be sent from the mobile station to a destination device is not the traffic received by the mobile station from base station B. In addition, the new traffic is modulated before being sent to base station B- not demodulated as required by claims 34 and 42. Furthermore, the modulated traffic is not multiplexed onto a local network by the mobile

station. Rather, the mobile station transmits the modulated traffic to base station B, which is not a local network.

For the aforementioned reasons, claims 34 and 42 are allowable over Argrawl. The remaining dependent claims, while separately allowable, depend from otherwise allowable independent claims. The applicant therefore refrains from a discussion of the remaining dependent claims for the sake of brevity.

CONCLUSION

Based on the above remarks, the Applicant submits that claims 32-47 are allowable. Additional reasons in support of patentability exist, but such reasons are omitted in the interests of clarity and brevity. The Applicant thus respectfully requests allowance of claims 32-47.

The Applicant believes no fees are due with respect to this filing. However, should the Office determine fees are necessary, the Office is hereby authorized to charge Deposit Account No. 21-0765.

Respectfully submitted,

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